

able form—toast, zweiback, light crackers, and pulled bread. Rice and cereals may be used in moderate amount, and potatoes, if allowed, must be well baked and mealy. Articles usually forbidden are sweet potatoes, cake, griddle cakes, most desserts, candy, canned fruits, highly seasoned food, condiments and fancy dishes.

Where there is much indigestion, the menu should be simple. Sometimes it is better to give carbohydrates and animal foods separately. For instance, at meals where meat is used, give only vegetables and relishes with it. During an acute attack of heart trouble, a patient must have a much lighter, though nutritious diet—milk, beef-juice, raw egg, soup, broth, wine jelly, trapon, and somatose.

The amount of liquids taken is a very important matter and is carefully watched. If too much is taken, the blood-vessels are distended, arterial tension is greater, and the work of the heart is increased; the stomach is distended, also, causing shortness of breath. On the other hand, if an insufficient amount be taken, the blood-pressure may be too greatly lowered, and there may not be free diuretic action. The doctor will usually state definitely the amount of fluid allowed, and this includes all liquids—soup, tea, coffee, etc., not merely water. Liquids which may be taken are, weak tea and coffee, buttermilk, kumiss, malted milk, and milk. These should be of a medium temperature, neither iced nor very hot.

(To be continued.)

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## THE ALLEVIATION OF THE DISCOMFORTS FOLLOWING ANÆSTHESIA.\*

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THE after-treatment of every surgical operation consists in rest. It is most essential to prevent the ligatures giving way, and to lessen the likelihood of irritation of the stomach, and vomiting. The patient frequently feels a great deal of distress following the administration of ether; some of which can be relieved, so aiding to give the one needful thing—perfect rest.

Perhaps the most valuable of these relieving measures are those taken before the operation; as, for instance, the withholding of solid food the day previous, thus lessening the irritation of the stomach; the drinking of a quantity of water, thus lessening the likelihood of any irritation of the bladder; catharsis and enemata given to evacuate

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\* Awarded the prize of \$75 offered by the School.

the bowels. The loss of vitality varies according to the strength of the patient, the loss of blood, and the length of the operation. To enable the body to regain its tone, the room, ventilation, quiet, bed, clothing, surroundings, position, et cætera, all must be taken into consideration. The room, if possible near to the bathroom and containing a fireplace, should be well ventilated, the temperature 68 or 70 F. All unnecessary furniture should be removed. The light, shaded from the patient's eyes, should be subdued, but not so much excluded that the patient's features and color cannot easily be watched. Quiet maintained, and only such visitors allowed in as the doctor permits, knowing that they realize that any excitement uses up energy which the patient can ill afford to lose. The patient should lie between warmed blankets, the head should be low, and protected by a pillow from striking the top of the bed. The gown should be loose and warm, opening at the back. As there is frequently profuse sweating, other warmed gowns should be in readiness; along with a pneumonia jacket, towels, low pus basins, a mouth-gag and tongue-forceps for emergencies.

The position of the patient in bed must be one that is unconstrained. If a limb has been operated on it should be elevated on a pillow to lessen the danger of hemorrhage; the weight of the clothes removed, by the use of a cradle. In abdominal cases, a roll under the knees will relax the abdominal muscles, and remove the strain the patient makes to hold up her knees. Pillows of all kinds and sizes are invaluable to give the perfect rest desired. One or two small ones may be placed in the hollow of the back, larger ones should be used to support the back when the patient is turned on her side; others may serve to relieve aching shoulders, buttocks, etc. A rubber ring is sometimes a great comfort.

Some patients while semi-conscious become very violent. Restraint should be only exercised while the effects of the ether are passing off, and then only to the extent of preventing them falling from the bed, or tossing about. A blanket may be pinned across if necessary, a gag inserted to prevent biting the tongue, and the knees bandaged to prevent injury. In gynaecological cases hypodermic injections of morphine with or without atropine are frequently given.

A dazed condition is common after ether; the patient may feel a lost, sinking sensation, and may be relieved by moistening the lips, stroking or bathing the forehead with alcohol solution. I have noticed that speaking to a patient by name or smoothing back her hair, has sometimes helped the patient to realize her surroundings, and to convey the comforting thought to her dulled senses that she

is being watched and cared for. Other cases may continue for some time in a quiet sleep, and then exhibit more or less marked signs of cerebral excitement.

The vomiting following ether is the most dreaded after-effect; some fortunate few escape entirely. The majority suffer from vomiting from six to twenty-four hours, some few for several days, even a week. The head should be lowered and kept as still as possible. The least strained position for the patient while vomiting is lying on the side with the body slightly flexed, or on the back with the knees drawn up resting on a pillow. While unconscious, vomited matter may accumulate in the pharynx and be inhaled or obstruct the breathing. Or it may enter the larynx or trachea with the same result. These chances are lessened by the withholding of solid food for some hours before the operation. When this accident occurs, the jaws should be opened, the head turned to one side, and the shoulder raised, thus aiding the removal of the obstruction. If these means are non-effectual, the doctor should know at once, as tracheotomy might be necessary. The patient should not be left alone until she has regained the control of the muscles of her throat, so that vomitus could not slip back. She should be encouraged to "spit it out" and then have her mouth washed out. Hypodermic injections of atropine before the operation help to lessen the amount of mucous secreted.

A variable degree of irritability of the whole digestive tract is the common result of anaesthesia, especially in cases of abdominal section. Vomiting and nausea are rather increased than diminished by drugs, food and drinks. They should be withheld until the toxæmia of the ether has passed. The treatment is rest for the stomach, with the exception, in some cases, of giving slowly a teacupful of hot water. This may be promptly thrown up, but it will wash out the stomach and may give a little relief. A regular lavage may be necessary to wash out an accumulation of mucous in the stomach. Various applications to the stomach, as ice, or a mustard plaster, or spraying the stomach with ethyl chloride have given relief. The inhalation of acetic acid or vinegar is also good. In more prolonged cases many things have been tried with varied success—a little black coffee, brandy, aromatic spirits of ammonia, ipecac, hyoscin, chloroform or sugar, tr. of capsicum; cocaine gr.  $\frac{1}{2}$  every two hours for five doses has been successful in very severe cases. Tincture of iodin gtt.j in a little water at half hour intervals. Morphine will sometimes relieve and sometimes aggravate the trouble.

Hysterical vomiting following in about 1 per cent. of abdominal

section, may subside by itself. Morphia given in large doses allays irritation and induces sleep. Some slight attention to the wound has often stopped the prolonged vomiting.

Thirst and dryness of the mouth, which is often a troublesome feature, may be relieved to some extent by frequent bathing of the face and hands with alcohol and tepid water and by the washing of the mouth with cool water boracic or listerine solutions, not so cold as to cause the teeth to ache. A gargle of hot water when they can take it. Small pieces of gauze laid on ice, then placed over the lips. Pellets of ice may be given the patient when the vomiting has ceased. If the thirst is extreme, normal saline is given sub-cutaneously and rectally. When water is started by mouth it is given in small increasing doses, very hot, to settle the stomach.

In some cases rectal feeding may be necessary, for a time, giving the stomach absolute rest. After water has been taken by mouth, albumen water may be started; it is given at first with little or no flavoring (and no froth), and quite cold water, freshly-made tea, toast-water, milk and lime-water and broth are given.

Pain, that hinders the needful rest, may be due to many and various causes. The tightness of a dressing may cause impaired circulation, the edge of a plaster cast may be pressing into the flesh, causing a great deal of pain. Bed-sores may be prevented by keeping the patient and bedding clean and dry, the linen smooth, and the pressure removed from one part to another. Aching arms, legs, and back may be rubbed with alcohol or chloroform liniment and given a gentle massage. An aching head may be relieved by ice-cold compresses or the application of an ice-bag. The eyes sometimes burn and ache and may be protected by a shade or dark glasses. Cold compresses may be applied to the eyes, or they may be irrigated with tepid boracic and saline solution. The lips may have been burned by ether or chafed by the compresses used to relieve the thirst. Cold cream or cocoa butter will quickly give relief. The tongue is sometimes bruised and swollen from the use of the mouth-gag. Boric solution mouth-douches quickly relieve the inflammation; they may be followed by a drop or two of aboline on the tongue.

Gas in the bowels is a very distressing and quite frequent trouble; as the muscular walls of the intestine, sharing in the patient's weakness, are relaxed peristalsis is diminished. This condition can be relieved by the passing of the rectal tube, by turpentine stupes to the abdomen, by turpentine enemata, by carminatives, and by catharsis.

Hiccoughs occasionally occur during the first few hours after an

operation. In mild cases they respond to "holding the breath," the administration of hot water, ice, heroin, carminatives, or the application of mustard paste to the epigastrium. In more severe cases tongue traction is tried. Morphine or atropine are given hypodermatically with good results.

Sleeplessness is not uncommon. It may be helped by sponging the palms of the hands, the arms and legs. A hot drink, a rearrangement of the pillows, fresh air, fresh linen on the bed, or the luxury of an entire fresh bed, would often secure a good night's rest, without resorting to hypnotics.

The evacuation of the bowels is brought about by catharsis, and enemata as soon as possible, according to the operation.

Ether frequently leaves some irritation in the urinary tract, due partly to the lessened secretion by the kidneys, and the concentration of the urine. When it occurs, hypodermoclysis and enemata will give some relief. After a certain period of time, according to the operation, if the patient is still unable to void, micturition may be brought about by a warm steaming bed-pan. The sound of running water will often help. Hot water poured over the pubes, or hot compresses applied, will often prove effectual. The injection of one-half pint of warm water to the rectum, the administration of sweet spirits of nitre, drachm I every half hour, or if there is no objection to the patient sitting up the assumption of that posture may have the desired effect, remembering that the presence of another person is often an inhibitory factor. These failing, catheterization must be performed.

The patient should be bathed daily, rubbed with alcohol, and all folds of the skin powdered. The teeth and mouth washed, and the hair combed when possible. The atmosphere of the room kept bright and cheerful.

As some patients recover from the anæsthetic they become very much depressed over the length of time required for convalescence, or over what they know or conjecture has been done in the operation. The nurse must keep her patient's mind at ease, using great tact in not allowing her to learn of any disturbing news, and note her condition by unobtrusive observation instead of questionings.

Pneumonia and pleurisy occurring after operation may follow as the result of chilling or exposure, or it may be due to the inhalation of the fumes of the sputum.

The state of profound unconsciousness, with its characteristic complete relaxation of the muscular system, moist skin, loss of special senses, contracted pupils, slow, deep, respirations, conjunctiva,

insensitive to the touch, may alter suddenly. The respiration must be closely watched, as the heart may continue to beat after they have ceased. Artificial respiration must then be started immediately, and maintained with no cessation until breathing is restored. First, however, the position of the tongue must be observed; if it has slipped back, so causing the asphyxia, it may be pulled forward with the fingers or forceps, then by pushing the lower jaw forward, and upward, a recurrence of the mishap is prevented.

The nurse should keep the symptoms of adverse changes in mind, so as to recognize them at an early stage. She should not make the mistake of trying to relieve a trifling ailment, when it is only a symptom of a serious change impending, which will require all her efforts to ward off. She must also remember that the patient may often hear, understand, and afterwards remember what is being said, and yet be unable to make any motion to show her consciousness.



PORLAND, OREGON, is said to be the first coast city north of San Francisco to have a suitable residence for the graduate nurses. About sixty nurses will find accommodation there; visiting nurses will always be made welcome. This house has been established by Miss L. G. Richardson, a graduate of the Northwestern Hospital, of Minneapolis. It is situated on the corner of Third and Montgomery streets, and combines the attractions of a cosey home with an appearance of hospital order and cleanliness, such as nurses are accustomed to in their training.

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NEW YORK is to have an open-air hospital for tuberculous children for which \$125,000 was contributed by Mr. Rockefeller, and an equal amount by other philanthropists. New York has 4,500 cases of tuberculosis of bones in children. It is proposed to have a chain of these hospitals all along the coast.

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THE summer camp for the children of the Juvenile Court at Denver, Col., has been opened at Glenmore Lake. Miss L. O'Neil, one of the nurses connected with the staff of the Visiting Nurse Association, is the nurse in charge.